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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/634,317	08/05/2003	Anthony D. Studer	200300730-1	7888

22879 7590 03/18/2005

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EXAMINER

VO, ANH T N

ART UNIT PAPER NUMBER

2861

DATE MAILED: 03/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

H.A

**Office Action Summary**

Application No.

10/634,317

Applicant(s)

STUDER ET AL.

Examiner

Anh T.N. Vo

Art Unit

2861

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 February 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-5, 7, 9-12, 15, 19-25, 28 and 31-34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7, 9-12, 15, 19-25, 28 and 31-34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                                   | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>1/24/2005</u> .   | 6) <input type="checkbox"/> Other: _____                                    |

***FINAL REJECTION***

***Response to Applicant's Amendment***

***Information Disclosure Statement***

The reference WO 96/04141 cited on the PTO 1449 form have not been considered because this reference WO 96/04141 is not provided by the applicant.

***CLAIM REJECTIONS***

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

Claims 1-2 and 32 are rejected under 35 USC 102 (b) as being anticipated by Ujita et al. (US Pat. 5,784,088).

Note: The method steps are inherently taught in the apparatus device/limitations in the rejections as follow:

Ujita et al discloses in Figures 16-17A an ink container for use in an ink jet printer comprising:

- At least one compartment;
- First (48) and second (81) vents that communicatively couple the compartment to an Atmosphere surrounding an exterior of the ink reservoir (3) (Figure 17A);
- Wherein the first vent (48) is disposed in a cover of the ink reservoir (3) and the second vent (81) passes through a wall of the ink reservoir (3) that is opposite the cover and is in Addition to an interconnect port (39) passing through the wall (Figure 17A); and
- A capillary medium (37) located within the compartment for containing ink and acting to prevent the ink from leaking through the interconnect port (39).

Claims 1-5, 9-12, 19-20, 22-23, 28 and 32-33 are rejected under 35 USC 102 (e) as being anticipated by Ardito et al. (US Pat. 6,776,479).

Note: The method steps are inherently taught in the apparatus device/limitations in the rejections as follow:

Ardito et al discloses in Figures 1-5 an ink container for use in an ink jet printer comprising:

- a print head (16);
- an ink reservoir (12) supplying ink to the print head (16) (Figure 1-2);
- at least one compartment (202);
- first (218) and second vents (220) that communicatively couple the compartment (202) to an atmosphere surrounding an exterior of the ink reservoir (12) (Figures 3 and 5, column 5, lines 10-17);

- wherein the first vent (218) is disposed in a cover (204) of the ink reservoir (12) and the second vent (220 not shown) passes through a wall of the ink reservoir (3) that is opposite the cover and is in addition to an interconnect port (212) passing through the wall (Figure 5);
- a capillary medium (222) located within the compartment (202) for containing ink and acting to prevent the ink from leaking through an outlet (212) of the ink reservoir (12) (Figures 3 and 5);
- wherein the capillary medium (222) is of a hydrophilic material (Figure 5, column 3, lines 14-15);
- wherein a fiber direction of the hydrophilic material is substantially perpendicular to the first and second vents (Figure 5);
- wherein the first (218) and second vents (220) are labyrinth vents (Figures 4-5);
- wherein the first vent (218) is disposed in a cover (204) of the ink reservoir (12) and the second vent (220) is disposed in a wall of the ink reservoir (12) that is opposite the cover (204) (Figures 3-5);
- wherein the first elongated vent path comprises a first groove disposed in the cover closed by a first seal (304) and second elongated vent path (220) comprise a second groove (not shown groove) disposed in exterior surface of the wall (bottom wall of of ink container 12) and closed by a second seal (302) (Figures 3 and 5, column 5, lines 10-17); and
- the first (218) and second airflows (220) substantially simultaneously from the compartment (202) to the atmosphere when the pressure of the atmosphere is less than the pressure in the compartment and/or when the pressure of the atmosphere is greater than the pressure in the compartment.

*Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior arts are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having

Art Unit: 2861

ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6-7, 15, 21, 24-25, 27, 31 and 34 are rejected under 35 USC 103 (a) as being unpatentable Ardito et al. (US Pat. 6,776,479) in view of Watanabe (US Pat. 6,247,804) and further in view of Childers et al. (US Pat. 6,402,306).

Note: The method steps are inherently taught in the apparatus device/limitations in the rejections as follow:

Ardito et al discloses in Figures 1-5 an ink container for use in an ink jet printer comprising:

- a print head (16);
- an ink reservoir (12) supplying ink to the print head (16) (Figure 1-2);
- at least one compartment (202);
- first (218) and second vents (220) that communicatively couple the compartment (202) to an atmosphere surrounding an exterior of the ink reservoir (12) (Figures 3 and 5, column 5, lines 10-17);
- wherein the first vent (218) is disposed in a cover of the ink reservoir (12) and the second vent (220 not shown) passes through a wall of the ink reservoir (3) that is opposite the cover and is in addition to an interconnect port (212) passing through the wall (Figure 5);
- a capillary medium (222) located within the compartment (202) for containing ink and acting to prevent the ink from leaking through an outlet (212) of the ink reservoir (12) (Figures 3 and 5);
- wherein the capillary medium (222) is of a hydrophilic material (Figure 5, column 3, lines 14-15);
- wherein a fiber direction of the hydrophilic material is substantially perpendicular to the first and second vents (Figure 5);
- wherein the first (218) and second vents (220) are labyrinth vents (Figures 4-5);

Art Unit: 2861

- wherein the first vent (218) is disposed in a cover (204) of the ink reservoir (12) and the second vent (220) is disposed in a wall of the ink reservoir (12) that is opposite the cover (204) (Figures 3-5);
- wherein the first elongated vent path comprises a first groove disposed in the cover closed by a first seal (304) and second elongated vent path (220) comprise a second groove (not shown groove) disposed in exterior surface of the wall (bottom wall of ink container 12) and closed by a second seal (302) (Figures 3 and 5, column 5, lines 10-17) and
- the first (218) and second airflows (220) substantially simultaneously from the compartment (202) to the atmosphere when the pressure of the atmosphere is less than the pressure in the compartment and/or when the pressure of the atmosphere is greater than the pressure in the compartment.

However, Ardito et al. do not disclose the cover having two air vents that are communicated with the ink compartment and a flexible conduit fluidly couples the ink reservoir to the print head.

Nevertheless, Watanabe discloses in Figures 2-3 an ink tank comprising the cover (8) having two air vents (9a) that are communicated with the ink compartment (6).

Furthermore, Childers et al. disclose in Figure 11 a printing system comprising a flexible conduit (26) fluidly couples the ink reservoir (12) to the print head (24, 30).

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to incorporate the teaching of Watanabe and Childers et al. in the Ardito et al. ink supply system for the purpose of replenishing the ink tank with air by a volume equal to the volume of consumed ink and providing the flexible tube to supply ink from the ink tank to the print head.

*Response to Applicant's Arguments*


The applicant argue that Ardito et al. does not include a second vent passing through a wall of the ink reservoir that is opposite a cover and that is in addition to an interconnect port passing through the wall; a second elongated vent path that is formed in an exterior surface of a wall opposite a cover; a second airflow directing means that is separate from an interconnect port passing through a wall of an ink reservoir that is opposite a cover of the ink reservoir; and substantially simultaneously directing a second airflow through a wall of the ink reservoir opposite the cover and not through an interconnect port in the wall. The argument is not persuasive because these limitations are disclosed in the Ardito et al. reference as discussed above.

**CONCLUSION**

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Anh Vo whose telephone number is (571) 272-2262. The examiner can normally be reached on Tuesday to Friday from 9:00 A.M. to 7:00 P.M..

The fax number of this Group 2800 is (703) 872-9306.

  
ANH T. N. VO  
PRIMARY EXAMINER  
March 15, 2005